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# THE MISSING LINK: MARITAL VIRTUES AND THEIR RELATIONSHIP TO INDIVIDUAL FUNCTIONING, COMMUNICATION, AND RELATIONSHIP ADJUSTMENT

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## ABSTRACT OF THESIS

### THE MISSING LINK: MARITAL VIRTUES AND THEIR RELATIONSHIP TO INDIVIDUAL FUNCTIONING, COMMUNICATION, AND RELATIONSHIP ADJUSTMENT

Relationship adjustment research is being expanded beyond established connections with communication and individual functioning. In recent years, researchers have looked to positive psychology and virtues. That research shifts the focus from psychopathology and communication to more core values and ways of being. The present study seeks to expand this knowledge base using Blaine Fowers (2000) framework of marital virtues. His framework views what a person puts into an intimate relationship as an important predictor of relationship adjustment. The present study uses this framework in conjunction with previous research to examine the direct and indirect links amongst individual functioning, marital virtues, communication, and marital adjustment. Data were collected from a sample of 422 married and cohabitating individuals using a self-report survey. Marital virtues and communication were found to partially mediate the relationship between individual well-being and relationship adjustment. In addition, communication was found to partially mediate the relationship between marital virtues and relationship adjustment. Findings provide initial support for the notion that character strengths matter to both communication and relationship adjustment.

**KEYWORDS:** Marital Virtues, Positive Psychology, Relationship Adjustment, Couples, Communication

Amanda Veldorale-Brogan

April 11, 2008

THE MISSING LINK: MARITAL VIRTUES AND THEIR RELATIONSHIP TO  
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ADJUSTMENT

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April 11, 2008

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THESIS

Amanda Veldorale-Brogan

The Graduate School

University of Kentucky

2008

THE MISSING LINK: MARITAL VIRTUES AND THEIR RELATIONSHIP TO  
INDIVIDUAL FUNCTIONING, COMMUNICATION, AND RELATIONSHIP  
ADJUSTMENT

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THESIS

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A thesis submitted in partial fulfillment of the  
requirements for the degree of Master of Science in the  
College of Agriculture  
at the University of Kentucky

By

Amanda Veldorale-Brogan

Lexington, Kentucky

Director: Dr. Kay P. Bradford, Associate Professor of Family Studies

Lexington, Kentucky

2008

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## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
LIST OF TABLES .....	vi
LIST OF FIGURES .....	vii
LIST OF FILES .....	viii
CHAPTER 1 .....	1
Introduction.....	1
Literature Review.....	2
History of Virtues and Positive Psychology.....	2
Individual Functioning.....	3
Communication.....	4
Marital Virtues.....	4
Purpose of Research and Definitions.....	6
Theoretical Framework.....	8
CHAPTER 2 .....	11
Method .....	11
Background of BHMI.....	11
Design.....	12
Participants.....	13
Measures.....	14
Analysis.....	17
CHAPTER 3 .....	21
Results .....	21
Bivariate Correlations.....	21
Measurement Models.....	21
Multivariate Analyses.....	23
CHAPTER 4 .....	26
Discussion .....	26
Direct Effects.....	27
Indirect Effects.....	28
Implications.....	30
Appendix A .....	33
Appendix B .....	39
Appendix C.....	41
References .....	43



VITA .....	48
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## LIST OF TABLES

Table 2.1 Demographic Information.....	14
Table 3.1 Bivariate Correlations.....	22
Table 3.2 Parameter Estimates of Fixed Effects for Model 1.....	24
Table 3.3 Parameter Estimates of Fixed Effects for Model 2 and Model 3.....	25

## LIST OF FIGURES

Figure 2.1 Model 1.....	19
Figure 2.2 Model 2.....	20
Figure 2.3 Model 3.....	20
Figure 3.1 Combined Model.....	26

## LIST OF FILES

ThesisVVB.pdf; 310KB

## CHAPTER 1

### Introduction

Over the past several decades, a wealth of research has been conducted on marital adjustment. The majority of marital adjustment research has examined it from its relationship to one of two areas: individual functioning (Halford, Bouma, Kelly, & Young, 1999; Whisman, Uebelacker, & Weinstock, 2004, and others) and communication (Bienvenu, 1970; Burelson & Denton, 1997; Caughlin, 2002, and others). However, within the past decade some researchers (Fowers, 1998; Fowers, 2000; Hawkins, Fowers, Carroll, Yang, 2006; Carroll, Badger, & Yang, 2006) have suggested that marital adjustment may be linked to marital virtues such as other-centeredness.

Hawkins, Fowers, Carroll, and Yang (2006) developed the Marital Virtues Profile (MVP) as a measure of the construct of virtues. It measured six factors of marital virtues: (a) other-centeredness, (b) generosity, (c) admiration, (d) teamwork, (e) shared vision, and (f) loyalty/backbiting. Their initial results supported marital virtues as predictors of marital adjustment. However, the authors acknowledge that this was a pilot study and that much more research needs to be conducted in this area. To date, very few studies have added to this area of research.

## Literature Review

### *History of Virtues and Positive Psychology*

Fower's notion of virtues extends back to the philosophers of the ancient world. Most notably, Aristotle delved into the idea of virtues and what it meant to be virtuous. He saw virtues as those states of character, or ways of being that lead us to the good life (McKeon, 1947). It is fundamentally this that the field of positive psychology has sought to address. Seligman and Csikszentmihalyi (2000) state that the social and behavioral sciences can "articulate a vision of the good life that is empirically sound" (p. 5).

Gable and Haidt (2005) defined positive psychology as "the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (p. 104). It examines often ignored areas of human experience such as "gratitude, forgiveness, awe, inspiration, hope, curiosity, and laughter" (Gable & Haidt, 2005, p. 104). Seligman and Csikszentmihalyi (2000) describe positive psychology as a catalyst of change that will move the focus of psychology from only reparative of the negative, but also building the positive. They describe positive psychology at both the individual level, in terms of things like courage, the capacity for love, and forgiveness, and the group level, in terms of things like civic virtues, altruism, moderation, and responsibility. It is this base that opened the way for an examination of marital virtues.

### *Individual Functioning*

One area that has been well-researched in its connection to marital adjustment is individual functioning. Fincham and Bradbury (1993) found that people who scored low on marital adjustment were more likely to attribute the causes of relationship problems to their partner and that those causes were global and stable; the opposite was true for those who score high on marital adjustment. The relational (vs. individual) nature of this attribution may support the idea of the importance of examining the role of virtue of generosity, which encompasses ideas of forgiveness, acceptance, and appreciation. Halford, Bouma, Kelly, and Young (1999) examined depression, anxiety, alcohol abuse, and functional psychoses, and found a clear link between individual functioning and marital adjustment. Similarly, Jacob and Leonard (1992) found that individual distress in men, represented by depression more than alcoholism, led to a decrease in constructive and supportive responses to their wives, and hence higher levels of couple distress. Whisman, Uebelacker, and Weinstock (2004) used the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) as a measure of individual functioning and the Dyadic Adjustment Scale (DAS) as a measure of marital adjustment. They found that an individual's level of depression and anxiety was significantly linked to individual level of relationship adjustment. Higher levels of depression and anxiety were positively correlated with lower levels of relationship adjustment.

### *Communication*

Like the link between individual functioning and marital adjustment, the link between communication and marital adjustment also has been well established. Communication refers to “a couple’s ability to listen, to understand each other, [and] to express themselves” (Bienvenu, 1970, p. 27). In a study of 150 couples, Douglas Snyder (1979) used the Marital Satisfaction Inventory (MSI) and found that communication measures serve as the best predictors of relationship adjustment. The Conflict Resolution Style Inventory (CRSI) has been used in several studies as a measure of communication patterns and focuses on some of the behaviors, such as withdrawal, also examined by the Danger Signs Scale. Using the CRSI, Kurdek (1995) found a link between good partner resolution style and higher overall marital adjustment, especially for men. Burleson and Denton’s (1997) research supported the link between communication and marital adjustment in nondistressed couples. However, they failed to find the link in distressed couples. In fact, they found that among distressed couples, communication skills and relationship adjustment were negatively associated. This finding may point to the importance of *what* is communicated, as well as *how* it is communicated.

### *Marital Virtues*

Findings such as those by Burelson and Denton (1997) underscore the need for further research in the area of marital adjustment. Marital virtues is one new area of research in that vein. Stevens (2001) used grounded theory with a sample of ten married couples to develop a theory that explains the effect of virtues on marital intimacy. In particular she highlighted the virtue of other-



orientation and found that the presence of such virtues can increase intimacy.

Kaslow and Robison (1996) found in a study of 57 couples that those who were placed into the “satisfied” category based on their Dyadic Adjustment Scale (DAS) scores had better problem-solving skills and used more encouragement and collaboration. Although the authors do not use the language of virtues, these results can be used to show other-orientation as a predictor of greater marital adjustment.

In their work on Affective Reconstruction (2002), Snyder and Schneider posit that one of the main differences between healthy relationships and dysfunctional relationships is the degree to which partners are self-aware and aware of their partner. They also suggest that another important factor in relationship health is the ability and readiness to “defer one’s own gratification for the sake of another” (pg 162). This language suggests the importance of other-centeredness and generosity to the overall relational health of a couple.

Fowers’(2000) marital virtues framework was used in the creation of the Marriage Moments curriculum which was designed to strengthen relationships during the transition to parenthood. Several studies have examined marital virtues through the use of this curriculum. Gilliland (2002) conducted a pilot study and program evaluation of the Marriage Moments curriculum. She found that couples gave high score on the program evaluation and reported finding the introduction of marital virtues to be helpful and worthwhile as part of the course. Although Lovejoy (2004) and Fawcett (2004) failed to find a significant improvement in the relationships of their participants after receiving the Marriage

Moments curriculum, they did show promising results concerning the reliability and validity of the measure itself.

### *Purpose of Research and Definitions*

A study of marital virtues as predictors of relationship adjustment is important for several reasons. First, virtues may mediate the relationship between communication and relationship adjustment. Second, virtues may mediate the relationship between individual functioning and relationship adjustment. Third, a study on marital virtues is important in that a broadened knowledge of relationship adjustment, and the factors that go into having positive relationship adjustment, can help professionals in the field create more effective interventions for couples experiencing marital distress, and more effective marriage education programs. Such studies may help professionals in the field gain a better understanding of the relationship between marital virtues and its role in relationship adjustment. Fourth, researchers have often named good communication as the greatest predictor of relationship adjustment. A study of marital virtues can help explain not just how couples need to communicate, but what they need to communicate. This information can be incorporated into marital therapy and marriage education by helping couples to focus on one another and communicate effectively not just their needs or concerns, but also their focus on their partners.

The purpose of this study is to expand upon this literature, using Fowers and Tjeltveit's (2003) framework of virtue ethics and Hawkins et al.'s (2006) MVP (specifically the factors of other-centeredness and generosity) to examine the link

between marital virtues and relationship adjustment (as measured by the Revised Dyadic Adjustment Scale). Marital virtues refer to personal strengths possessed by each spouse. This study used two of the six subscales: generosity and other-centeredness. Generosity refers to “the willingness to give of oneself freely to the partner” (Hawkins, Fowers, and Carroll, 2006, p.11) and encompasses the attributes of forgiveness, acceptance, and appreciation. Other-centeredness refers to a person’s ability to be fair and understanding, and to make sacrifices for the relationship (Hawkins, Fowers, and Carroll, 2006). Hawkins and colleagues’ (2006) pilot study of the Marital Virtues Profile suggests that generosity and other-centeredness are two important factors in determining relationship adjustment.

It is important to note that the term relationship adjustment has been used in different ways throughout the literature. In his review of measurement issues, Sabatelli (1988) examines the term “marital adjustment.” He defines marital adjustment as most consistently referring to those processes that are presumed to be necessary to achieve a harmonious and functional marital relationship. (p. 894). He notes, however, that this definition is confounded by the view of satisfaction with the relationship and/or partner as a part of marital adjustment. Sabatelli defines marital satisfaction as typically referring to a person’s attitudes toward the partner and the relationship where the unit of analysis is the individual and the object of the analysis is the individual’s subjective impressions of the relationship. (p. 894). The term relationship adjustment is used in this study to clearly refer to the use of the word “adjustment” as this variable is measured in

the Revised Dyadic Adjustment Scale (RDAS) and to account for the presence of cohabitating partners in the study. However, the construct being measured is what Sabatelli would refer to as marital or relationship “satisfaction.”

The present study examines the link between communication, defined in this study by the absence of negative patterns of interaction, measured by the Danger Signs Scale (Johnson & Stanley, 2001), and relationship adjustment. Stanley, Markman, and Whitton (2004) identify the following types of negative interactions: (a) negative escalation, (b) invalidation, (c) negative interpretations, (d) winner/loser, and (e) withdrawal. In addition to examining this link, the present study addresses also the question of whether or not communication mediates the relationship between marital virtues and relationship adjustment. This study may help to provide avenues other than communication skills training to help strengthen marriages.

### Theoretical Framework

Although there is little research to date specifically related to marital virtues, several theories can help illuminate this discussion. First, the idea of virtues is in itself a framework. Hawkins, Fowers, and Carroll (2003) critiqued the field’s individualistic and economic-based model of couple interactions. They instead proposed that what one gives in a relationship, rather than what one receives, is most important in creating a stable and positive marriage.

The virtues framework put forth by Fowers (1998, 2000) and Hawkins, et al. (2003) is based on Aristotle’s definitions of virtue. In his *Nicomachean Ethics*, Aristotle defined virtue as a “state of character” which must be chosen (McKeon,

1947, p. 337). He described it as a “disposition to choose the mean” with the ultimate goal of “the good” rather than the extremes (p. 301). Fowers’ framework indicates that having and enacting certain personal states of character, or virtues, within the context of a marriage, will strengthen that marriage.

Fowers (2000) described working with couples on communication skills and found that although they could use the skills in session, they were unable to do so at home. This led him to look for other factors that might be affecting the ability to employ the communication skills. He posited that the communication skills being taught depended on more than just understanding the skills; it often takes a certain amount of self-control and an ability to contain personal reactions.

Fowers (2000) used the example of active listening as a communication skill. Active listening is a skill that helps promote better communication and understanding. It involves partners doing things to encourage one another to continue speaking, giving them a chance to clarify what they are saying, expressing that they are listening and have understood what their partner said, and indicating that they understand why their partner sees a situation in a certain way. Fowers suggested that simply knowing how to do these things (i.e., having the communication skills) is often not enough. During an argument these skills can go right out the window. Fowers (2000) suggested that in order to truly apply these skills, couples need to possess certain virtues, such as generosity. Active listening involves a gift of attention and interest to a partner. Being able to make gestures of encouragement is only helpful if they are backed up by a willingness to give attention.

Fowers' (2000) framework suggests that one would expect marital virtues and communication to influence or explain relationship adjustment. Higher levels of the marital virtues generosity and other-centeredness should be associated with higher levels of relationship adjustment as measured by RDAS. Similarly, better communication (i.e. lower levels of negative interaction) should be associated with higher levels of relationship adjustment. Further, Fowers' framework suggests that communication acts – at least in part – as a mediator in the relationship between marital virtues and relationship adjustment. Marital virtues act as the basis for what to communicate in order to achieve high levels of relationship adjustment. In other words, communication is the mechanism through which marital virtues are enacted.

Fowers' (2000) framework can be couched in the broader context of family theories and family therapy theories. Though the case could be made for several theoretical frameworks, this paper will be limited in focus to the Symbolic Interaction Framework and Bowen Family Therapy. Symbolic Interactionism makes the basic assumption that “human behavior must be understood by the meanings of the actor.” (White & Klein, 2008, p. 98). This suggests that it is important not just how people communicate with one another, but what meaning is assigned to the words and actions people use to communicate. Interpreting one's partner's words or actions in a positive light or making a positive attribution of his/her motives takes a certain amount of generosity. Additionally, this suggests the importance of interpreting one's partner's words and actions to be showing generosity or other-centeredness. Symbolic Interactionism also holds

that “actors define the meaning of context and situation.” (White & Klein, 2008, p. 98). This highlights both the importance of communication in the equation, in terms of sharing with one’s partner the meaning assigned to a particular context or situation, and marital virtues, in terms of what meaning is assigned.

Bowen Family Therapy can be used as a framework for understanding marital virtues and creating change through the process of couples’ therapy. One of the primary concepts of Bowen Family Therapy is that of differentiation. Differentiation refers to a person’s ability to process through situations logically and put on hold the instinctive “fight or flight” reaction to anxiety (Friedman, 1991). From Fowers’ (2000) framework the act of putting one’s anxiety on check to allow time for processing, communicating, and perhaps changing initial attributions or meanings about one’s partner’s actions is a clear act of generosity. Thus, differentiation in responding to one’s partner may be an aspect of marital virtues.

## CHAPTER 2

### Method

#### *Background of BHMI*

Those data used in this study were collected by the Bluegrass Healthy Marriage Initiative (BHMI). BHMI is a partnership between the Cabinet for Health and Family Services (part of the U.S. Administration for Children and Families), the University of Kentucky, and the Bluegrass Healthy Marriage Partnership (BHMP). BHMP is a non-profit network of Central Kentucky organizations that provides marriage education to the constituents of each other’s organizations.

The goals of the initiative include: (a) increasing the knowledge base about healthy marriages; (b) increasing accessibility to already present relationship enhancing resources; (c) increasing the quality and quantity of relationship enhancing resources; and (d) increasing couples' likelihood of utilizing relationship enhancing resources.

In order to pursue the goal of an increased knowledge base, BHMI conducts research with their participating partner organizations (PPOs). To this end, they have developed the Constituency Questionnaire (CQ). The CQ was created by compiling other previously validated measures of individual and relational functioning, either in part or in their entirety.

### *Design*

This study uses data collected through the Bluegrass Healthy Marriage Initiative (BHMI). Questionnaires were administered to groups of volunteers at their organizations by staff from BHMI. Men and women are asked to sit on opposite sides of the room to limit sharing between spouses/partners. The informed consent was distributed first and explained by BHMI staff. Once participants had returned their consent forms into the ballot box or envelope, the survey was distributed. Several portions of the questionnaire were explained for clarity and the BHMI staff remained to answer questions while participants filled out the questionnaire. When participants were finished they were asked to return their surveys to a ballot box separate from where they returned their consent forms. The research for this study has undergone approval by the IRB of the University of Kentucky and has a detailed informed consent.



### *Participants*

The participants in this study come from research data collected from organizations working with the Bluegrass Healthy Marriage Initiative (BHMI) as Participating Partners Organizations (PPOs). The participants in this study are 422 married and cohabitating individuals who are members of PPOs working with BHMI. Not all participants completed the questionnaire as a couple. Both partners completed the survey in 88 cases. To ensure the study of relatively stable relationships, this study uses data from cohabitating participants only if they have been cohabitating at least one year. Demographics are summarized in Table 2.1.

Table 2.1 Demographic Information

	N	%
Sex		
Male	204	48
Female	218	52
Race		
White	339	80
Non-White	83	20
Religion		
Roman Catholic	132	31.3
Other Christian	245	60.4
Buddhist	2	.5
Other	6	1.3
No Preference	17	4
Education		
8 <sup>th</sup> grade or less	1	.2
Some high school	6	1.4
High school diploma/GED	56	13.3
2-year or technical degree	90	21.3
Bachelor's degree	152	36
Graduate degree	113	26.8
Income		
Under \$10,000	14	3.3
\$10,000-\$24,999	33	7.8
\$25,000-\$49,999	71	16.8
\$50,000-\$74,999	97	23
\$75,000-\$149,999	80	19
Over \$150,000	37	8.8

### *Measures*

This study includes measures of: (a) Marital Virtues, (b) Communication, (c) Relationship adjustment, Disagreement, and Adjustment, and (d) Individual Functioning. Marital Virtues were measured with two subscales (of six) from the Marital Virtues Profile (Carroll, Hawkins, & Gilliland, 2006)--Other-Centeredness and Generosity. It is scored on a Likert scale from 1 (almost never) to 6 (almost always), with intermediary scores of 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often). Three items are reverse coded with 1 meaning "almost always" and

6 meaning "almost never." The MVP is reported about partner's behavior, so a higher score means a greater perception of marital virtues on behalf of the partner.

The original confirmatory factor analysis yielded 6 distinct factors: other-centeredness, generosity, admiration, teamwork, shared vision, and loyalty/backbiting. Cronbach's alphas for other-centeredness was .84 for wives and .79 for husbands. For generosity, the alphas were .81 for wives and .82 for husbands (Hawkins, et al., 2006).

In this study, confirmatory factor analysis shows factor loadings of .72 and above on generosity for men, with most loading above .80. All generosity items loaded at .80 and higher for women. For other-centeredness, items loaded at .60 and higher for men and .53 and higher for women, with most loading at .80 or higher for men and .77 and higher for women. One exception was the item, "my partner struggles to recognize the things I do for him/her", which loaded at .40 for men and .35 for women. This may be due to the ambiguous wording of the item. Because this item failed to load as expected for both men and women, it was dropped from the analyses. Reliability data reports Cronbach's alpha at .92 for both men and women.

The Communication section of the CQ is adapted from the Danger Signs Scale (Kline, Stanley, Markman, Olmos-Gallo, St. Peters, Whitton, & Prado, 2004). It is a Likert scale self-report questionnaire. Responses are 1 (often), 2 (sometimes), and 3 (rarely). The higher the score, the less negative interaction exists. This scale was originally used as part of a telephone survey and then

incorporated into the Oklahoma Marriage Initiative Statewide Baseline Survey (Johnson & Stanley, 2001). It has also been used as a measure of negative interactions by Stanley, Markham, and Whitton (2002; 2004) and Kline et al. (2004). Kline et al. (2004) reported alpha coefficients of .74 for women and .82 for men. Confirmatory factor loadings for the present study are .60 and above for men and .58 and above for women, with all items loading onto one factor. Reliability analysis for the present study reports Cronbach's alpha at .85 for men and .86 for women.

Relationship adjustment was measured using the Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson, 1995), including all three subscales: (a) cohesion, (b) consensus, and (c) satisfaction. It is a self-report Likert scale questionnaire. Responses range from 5 (always agree) to 0 (always disagree). Intermediate answers are 4 (almost always agree), 3 (occasionally agree), 2 (frequently disagree), and 1 (almost always disagree). A higher score means less distress, with a score of 48 being the cutoff for clinical distress. For the individual subscales, the cutoff scores are as follows: (a) 22 for consensus (items 1-6); (b) 14 for satisfaction (items 7-11); and (c) 11 for cohesion (items 11-14).

Confirmatory factor analysis for the present study shows factor loadings of .59 and above for men, with most loading above .70. The items loaded onto the expected three factors. Factor loadings for women were .60 and above, however the affection and sex questions of the consensus subscale factored better into cohesion and satisfaction, respectively. Cronbach's alpha for the present study

was .87 for men and .90 for women.

Individual psychological functioning was measured using a shortened version of the 45 question Outcome Questionnaire (OQ-45), the ten item Mini-OQ (OQ-10; Lambert et al., 1997). It is a self-report Likert scale questionnaire. Responses range from 0 (almost always) to 4 (never) for the positive scale questions with higher scores indicating lower levels of individual well-being. Responses for the negative scale questions range from 0 (never) to 4 (almost always) with higher scores indicating higher levels of individual distress. The OQ-10 was used by Seelert and colleagues (1999) to measure patient distress. They found that the items on the OQ-10 loaded onto two factors, which they termed psychological well-being and psychological distress. Their confirmatory factor analysis showed that the well-being items loaded at .76 and above, while the distress items loaded at .62 and above.

Similarly, confirmatory factor analysis for the present study shows the OQ-10 factoring onto two factors: a positive factor (well-being) and negative factor (distress). Factor loadings were .81 and above for men and .76 and above for women on items relating to well-being and .64 and above for men and .63 and above for women on most items relating to distress. The item "I feel stressed at work/school" loaded at .47 for men .49 for women. Cronbach's alpha for the present study was .86 for men and .87 for women.

### *Analysis*

As an initial test, bivariate correlations were conducted between the predictor variables (marital virtues, communication, and individual functioning), the outcome variable (relationship adjustment), and the control variables. These

are reported in Table 3.1 along with means and standard deviations.

Confirmatory factor analysis measurement models were run using AMOS for the marital virtues and communications section to determine factor loadings and goodness-of-fit.

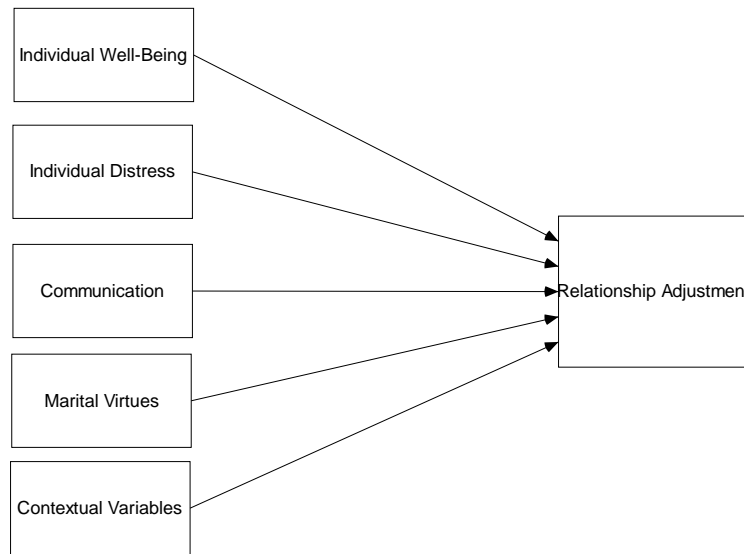
Finally, Hierarchical linear modeling (HLM) was used to conduct the multivariate analyses. A key feature of HLM is its ability to analyze variation in response variables based on shared contextual variables (Kreft & de Leeuw, 1998). Given 41.71% of the respondents (176 respondents) in our sample included coupled individuals, these observations were presumed to be dependent based on shared relational characteristics. As such, the analyses allowed for between-subject correlation of the error terms of partners' scores, which helped to reduce the magnitude of unexplained variation and to avoid inflated alpha levels (and thus type I error). This was done for both married and cohabitating respondents. Missing data were accounted for through value imputation using SPSS version 15.0. For further discussion of value imputation see Sande (1982) and Nordholt (1998).

Three models were tested. Contextual variables were included in each block of all models and included age, sex, marital status, ethnicity, education, religiosity, income, and perceived financial status. Model 1 tested the direct pathways from individual well-being, individual distress, communication, and marital virtues to relationship adjustment (Figure 2.1). The model was tested in six blocks.

Block 1 tested the pathways from individual well-being and individual

distress to relationship adjustment. Block 2 added in communication and tested the pathways from individual well-being, individual distress, and communication on relationship adjustment. Block 3 tested the pathways from individual well-being, individual distress, and marital virtues to relationship adjustment. Block 4 tested the pathway from marital virtues to relationship adjustment. Block 5 tested the pathways from communication and marital virtues to relationship adjustment. Block 6 tested the full model and included the pathways from individual well-being, individual distress, communication, and marital virtues to relationship adjustment.

Figure 2.1 Model 1



Model 2 (Figure 2.2) and Model 3 (Figure 2.3) were used to test the potential mediating effects of communication and marital virtues. In Model 2, communication was used as the dependent variable, with individual well-being and distress and marital virtues as independent variables. The analysis was conducted in two blocks. Block 1 tested the effects of individual well-being and individual distress on communication. Block 2 added marital virtues and tested

the pathway from marital virtues to communication. In Model 3, marital virtues was the dependent variable and individual functioning and individual distress were independent variables (tested in a single block). It is important to note that in all analyses individual well-being is measured on the OQ-10 with lower scores indicating greater well-being. Thus, higher scores on the OQ-10 (less well-being) are expected to be negatively correlated with positive communication, marital virtues, and high levels of relationship adjustment.

Figure 2.2 Model 2

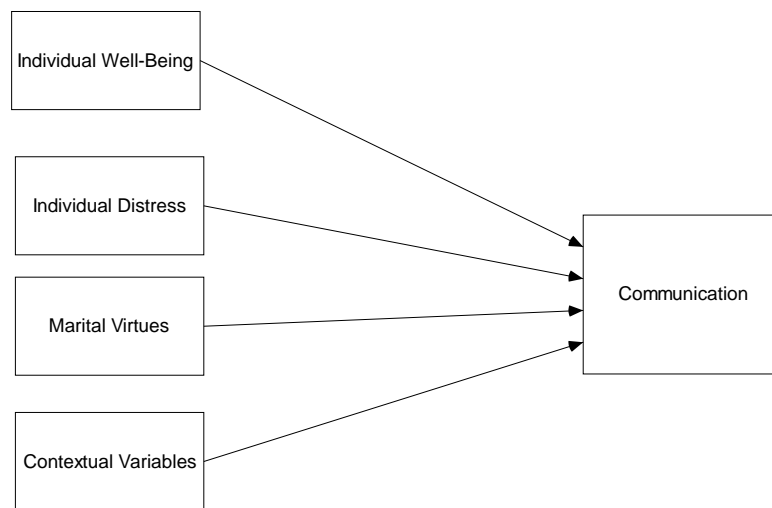
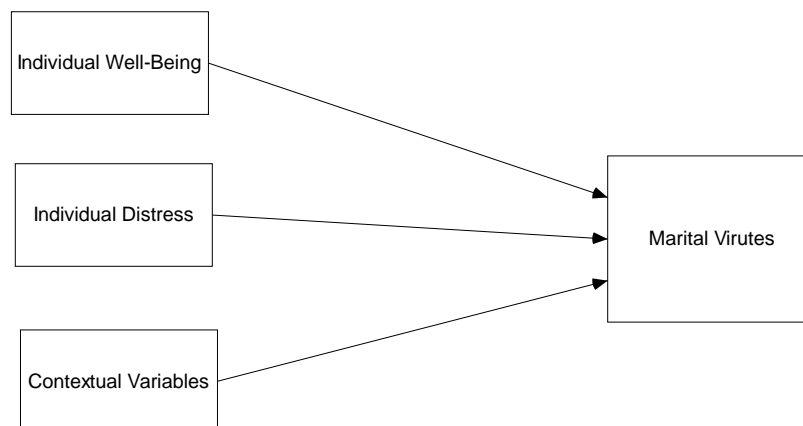


Figure 2.3 Model 3





## CHAPTER 3

### Results

#### *Bivariate Correlations*

Bivariate correlations were conducted for the predictor variables (individual well-being and distress, marital virtues, and communication), outcome variable (relationship adjustment), and the control variables. The control variables for this study were age, sex, marital status, race/ethnicity, educational level, religiosity, income, and perceived financial situation. Marital status and race/ethnicity were not correlated with any of the variables of interest. Age was significantly positively correlated ( $r = .12$ ,  $p < .05$ ) only with relationship adjustment. Sex was significantly positively correlated ( $r = .22$ ,  $p < .01$ ) only with individual distress. All other control variables were significantly correlated with multiple variables of interest (see Table 3.1). Bivariate correlations among predictor variables and between those and the outcome variable were statistically significant ( $p < .05$ ) and in the hypothesized directions.

#### *Measurement Models*

Measurement models were conducted in AMOS version 7 for the marital virtues and communications variables. Measurement models were run separately for both men and women. Model fit indices were good and factor loadings (in all cases) indicated acceptable reliability of these items (see Appendix A).

Table 3.1 Bivariate Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Marital Adj.	1												
2. Ind. Well-Being	-.60**	1											
3. Ind. Distress	-.35**	.51**	1										
4. Marital Virtues	.76**	-.58**	-.28**	1									
5. Comm.	.75**	-.56**	-.34**	.73**	1								
6. Age	.12*	.00	.05	.06	.05	1							
7. Sex	-.08	.03	.22**	-.01	-.09	-.03	1						
8. Marital Status	-.04	.01	-.08	.05	-.05	-.08	.06	1					
9. Race/Ethnicity	-.05	.05	.00	-.02	-.05	.00	.16**	.17**	1				
10. Education	.14**	-.13**	.03	.16**	.13**	.09	-.06	-.18**	-.24**	1			
11. Religiosity	.18**	-.13**	.06	.14**	.09	.08	.08	-.18**	-.03	.25**	1		
12. Perceived Finances	-.23**	.25**	.13**	-.19**	-.19**	-.15**	.02	.14**	.07	-.25**	-.15**	1	
13. Income	.12*	-.11*	-.06	.06	.09	.17**	-.16**	-.33**	-.23**	.35**	.10*	-.49**	1
Mean	49.6	3.8	6.3	57.3	19.4	43	.52	.08	1.2	5.73	3.3	2.7	4.4
SD	9	3	3	12	3.8	52.2	.5	.27	.4	1.1	.68	.81	1.6

\*p&lt;.05; \*\*p&lt;.01

### *Multivariate Analyses*

In Model 1 direct pathways between the independent variables and relationship adjustment were examined in six blocks (Table 3.2). All reported coefficients are unstandardized. In Block 1 the effects of the independent variables individual well-being ( $\beta = -1.26, p < .01$ ) and individual distress ( $\beta = -.35, p < .05$ ) were tested. In Block 2 communication was added, and was found to positively predict relational adjustment ( $\beta = 1.39, p < .05$ ). The addition of communication into the direct model reduced the variance components of both individual well-being ( $\beta = -1.26$  to  $\beta = -.59, p < .01$ ) and individual distress ( $\beta = -.35$  to  $\beta = -.16, p > .05$ ), and model fit differences were significant  $\Delta\chi^2_{(1)} = 166.44$  ( $p = .001$ ). With the addition of communication, individual distress became insignificant, which suggests that communication fully mediates the relationship between individual distress and relationship adjustment. In Block 3 marital virtues was added to the direct model (Block 1) and found to positively predict relationship adjustment ( $\beta = .46, p < .05$ ). The addition of marital virtues to the direct model reduced the variance component of individual well-being ( $\beta = -1.26$  to  $\beta = -.49, p < .01$ ), but not distress. Model differences were statistically significant  $\Delta\chi^2_{(1)} = 172.22$  ( $p = 0.001$ ). In Block 4 the effect of marital virtues ( $\beta = .55, p < .01$ ) on relationship adjustment was separately tested. Communication was excluded in Blocks 3 and 4 in order to test the independent effects of marital virtues on relationship adjustment and the additive effect of marital adjustment versus communication on the link between individual functioning and relationship adjustment. In Block 5 communication ( $\beta = .98, p < .01$ ) was added to Block 4 in

order to test the effect of communication on the pathway between marital virtues and relationship adjustment. The addition of communication into this link reduced the variance component of marital virtues ( $\beta = .55$  to  $\beta = .32$ ,  $p < .01$ ). Model differences were statistically significant with  $\Delta\chi^2_{(1)} = 66.53$  ( $p = 0.001$ ). In Block 6 the effects of individual well-being ( $\beta = -.36$ ,  $p < .05$ ), individual distress ( $\beta = -.22$ ,  $p > .05$ ), communication ( $\beta = .83$ ,  $p < .01$ ), and marital virtues ( $\beta = .29$ ,  $p < .01$ ) were tested simultaneously. The model fit between the direct model (Block 1) and the final model (Block 6) was statistically significant with  $\Delta\chi^2_{(1)} = 221.89$  ( $p = 0.001$ ), suggesting that the full model adds predictive power. Correlation coefficients for coupled data are reported for all blocks in Tables 3.1 and 3.2. Correlation coefficients (testing the correlation between the error terms of coupled responses on the dependent variable) were significant in the direct model (Table 3.2 Block 1) and in Block 4 of Table 3.2, suggesting that couple's responses were significantly linked between partners on relationship adjustment.

Table 3.2 Parameter Estimates of Fixed Effects for Model 1†

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Individual Well-being	-1.26**	-.59**	-.49**	--	--	-.36*
Individual Distress	-.35*	-.16	-.31*	--	--	-.22
Communication	--	1.39**	--	--	.98**	.83**
Marital Virtues	--	--	.46**	.55**	.32**	.29**
$\chi^2$	2402.91	2236.47	2230.69	2266.46	2199.93	2181.02
Correlation Coefficient	.45**	.09	.24	.30*	.07	.09

† Unstandardized estimates

\*  $p < .05$

\*\*  $p < .01$

Table 3.3 shows the results from model 2. In Block 1 the effects of individual well-being ( $\beta = -.55$ ,  $p < .01$ ), and individual distress ( $\beta = -.07$ ,  $p = .20$ ), on communication were tested. Marital virtues were added ( $\beta = .20$ ,  $p < .01$ ) to the model in Block 2; this reduced the variance component of individual well-being ( $\beta = -.55$  to  $\beta = -.18$ ,  $p < .01$ ). Model differences were statistically significant with  $\Delta\chi^2_{(1)} = 180.76$  ( $p = .001$ ). Results for model 3 are presented in Table 3.3. Individual well-being was a significant predictor of marital virtues ( $\beta = -1.7$ ,  $p < .01$ ), however individual distress ( $\beta = .11$ ) was not. Correlation coefficients for couple responses on the dependent variable for Models 2 and 3 are reported in Table 3.3. The coefficient was significant only in Model 3.

Table 3.3 Parameter Estimates of Fixed Effects for Model 2 and Model 3†

	Model 2 Block1	Model 2 Block 2	Model 3
Marital Virtues	--	.20**	--
Individual Well-being	-.55**	-.18**	-1.7**
Individual Distress	-.07	-.07	.11
Correlation Coefficient	.22	.11	.47**

† Unstandardized estimates

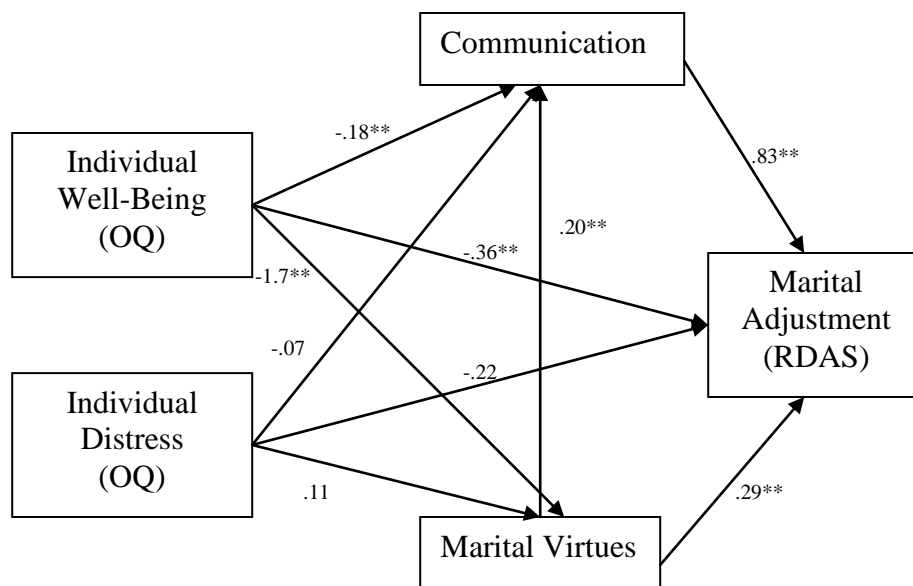
\*  $p < .05$

\*\* $p < .01$

The combined results of the three models are reported in Figure 3.1. Pathways from individual well-being to communication and from communication to relationship adjustment were significant. The direct pathway from individual well-being to relationship adjustment remained significant as well. This was also true for the pathways from individual well-being to marital virtues and marital virtues to relationship adjustment. Because all pathways from individual well-

being to relationship adjustment were significant, partial mediation of this relationship by communication and marital virtues can be assumed (Kline, 2004). Likewise, the pathways from marital virtues to communication and from communication to relationship adjustment are significant. The direct pathway from marital virtues to relationship adjustment is significant as well, indicating that communication partially mediates the relationship between marital virtues and relationship adjustment.

Figure 3.1 Combined Model†



† Unstandardized estimates

\* $p < .05$ , \*\* $p < .01$

## CHAPTER 4

### Discussion

The purpose of this study was to examine a potential missing link in the relationship between individual wellbeing, communication, and relationship adjustment. All hypothesized pathways were significant, with the notable exception of individual distress. Individual well-being predicted relationship

adjustment, and both marital virtues and communication were mediators between individual functioning and relationship adjustment. These mediational pathways were only partial, however. The direct linkages remained: communication was found to directly predict relationship adjustment. Likewise, marital virtues directly predicted relationship adjustment and communication. The virtues of other-centeredness and generosity thus underpinned the established link between communication and relationship adjustment.

### *Direct Effects*

The direct effects are consistent with previous literature on relationship adjustment (Jacob & Leonard, 1992; Kurdek, 1995; Snyder, 1979; Whisman, Uebelacker, & Weinstock, 2004). The higher the level of individual functioning a person experiences, the higher level of relationship functioning they are likely to have. Surprisingly, individual distress dropped out as a predictor. As expected, low levels of negative communication were found to strongly predict high levels of relationship adjustment. Also, the direct effects support Fowers' (2000) theory that marital virtues provide the basis for what needs to be communicated between couples.

Moreover, the direct effects support Seelert and colleagues' (1999) findings that individual functioning occurs in two main domains: individual well-being and individual distress. The direct effects of the present model suggest that individual well-being has a greater impact on relationship adjustment than does individual distress. This fits well into Fowers' (2000) framework which suggests that it is the positives people are willing and able to communicate that form the

basis for high levels of marital adjustment. Indeed, individual distress had no significant effect on any variable of interest, which lends support to the notion within positive psychology that the presence of well-being within a person individually has a greater impact on how they relate to others than the presence of distress within that person (Seligman & Csikszentmihalyi, 2000). Fowers (2000) suggests that marital virtues are a necessary prerequisite to positive communication. These virtues form the basis for people to be able to employ good communication skills, which he posits will ultimately lead to improved relationship adjustment. The direct effects confirm the pathway from marital virtues to communication, supporting Fowers' idea. Also, they confirm marital virtues as a significant predictor of relationship adjustment.

Another interesting finding was the strong relationship between individual well-being and marital virtues. Individual well-being was found to be a strong predictor of marital virtues. This finding suggests that it is important to cultivate individual well-being in order to improve an individual's ability to possess marital virtues. Individual well-being was also found to be a predictor of communication, suggesting that individual well-being may be an important precursor in a person's ability to communicate marital virtues even if they possess them.

#### *Indirect Effects*

The indirect effects of the present model point to several potential pathways of mediation, but three are of note. The first two of these are pathways from individual well-being to relationship adjustment. The link between individual well-being and relationship adjustment was mediated by communication. This



finding may suggest that the happier someone is the more likely he or she is to have lower levels of negative communication. The lower the levels of negative communication, the more likely someone is to be satisfied in his or her relationship; in this latter case, the strength of the correlation was relatively greater.

The second mediated relationship is the pathway from individual well-being to relationship adjustment through marital virtues. Higher levels of individual well-being are predictive of better relationship adjustment, but this relationship was mediated by the strong linkage between individual well-being and marital virtues. The happier someone is, the more likely he or she is to possess qualities such as other-centeredness and generosity. The higher levels of these virtues someone possesses, the more likely he or she is to be more satisfied in his or her relationship.

The third finding adds the key component of Fowers' (2000) framework that synthesizes the previous two findings of indirect effects. The higher levels of marital virtues one possesses, the more able he or she is to have low levels of negative communication. The lower the levels of negative communication, the more likely someone is to be satisfied in his or her relationship.

Taken in combination, these three findings lend support to Fowers' (2000) framework of marital virtues and to the broader area of positive psychology. These findings suggest that at the base of positive relationship adjustment is individual well-being. However, it is not individual well-being alone that leads to relationship adjustment. Rather, individual well-being leads to marital virtues

which, enacted through positive communication, lead to positive relationship adjustment.

### *Implications*

These findings have implications for couple's therapy as well as for marriage/relationship education. Past theoretical and empirical work on relationship adjustment have focused largely on communication as the point of intervention in couple's lack of relationship adjustment. However, the present study suggests that other areas may be at least equally as important points of intervention. Increases in marital virtues and individual well-being are areas that may be expanded on in couple's therapy and education. One possible avenue is integrating an overt dialogue about marital virtues, what they are, and how they are enacted, into work with couples. Another approach may be to focus on attributions and how these are made. Additionally, the present study suggests that a shift away from lessening the negatives to increasing the positives may be an important way to help couples increase their relationship adjustment.

Bowen Family Therapy may provide a language in which to couch marital virtues as well as some tools for therapists to teach clients about marital virtues. As mentioned previously, the language of differentiation may be useful to clients in understanding their negative reactions to their partners as a "fight or flight" reaction to anxiety. The concepts of marital virtues can enrich this understanding of differentiation and therapists can help clients in this way to find reactions that are more generous and other-centered. Additionally, the transgenerational frame of Bowen Family Therapy affords therapists the ability to draw on clients' past

experiences in which they have experienced people in their families reacting to one another in generous and other-centered ways.

### *Limitations and Further Research*

The generalizability of this study is limited by the nature of the BHMI data set. These limits include that: (a) all participants are from Fayette County, Kentucky and the seven surrounding counties; (b) many of the participating partner organizations are churches; (c) the majority of the sample is well-educated, white middle-class; (d) all of the participating partner organizations have expressed an interest in marriage education programs; (e) the survey was cross-sectional and required only a single-respondent answer; and (f) the survey uses only two subscales of the instrument to measure virtues.

The data in the present study differs in some important ways from a statewide baseline survey of a relatively representative sample of Kentuckians, conducted by BHMI in 2004. The majority of respondents in the 2004 survey were white, however they were overall less educated, with only 30% having a Bachelor's or Master's degree, as compared to nearly 63% in the present study. The income level varied as well, with about 60% in the statewide survey making less than \$50,000, as compared with 50% in the present study. Also, only 43% of the respondents in the 2004 Kentucky survey stated that they would consider marriage education, as compared to 78.7% in the present study.

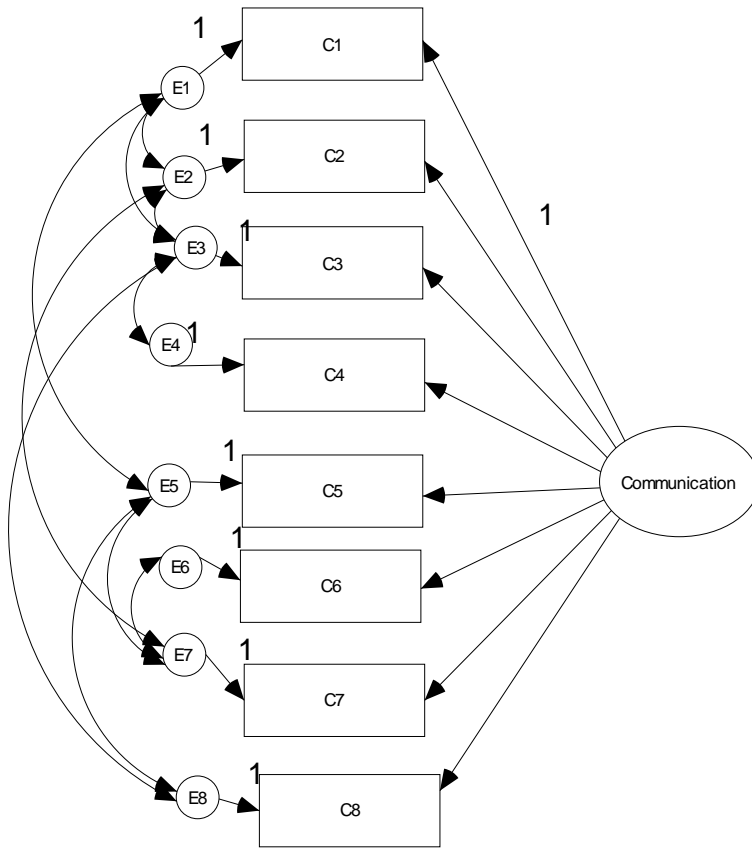
Only a limited view of marital virtues can be obtained through this study because the CQ uses only two of the subscales of the MVP. This limits the findings to the areas of generosity and other-centeredness and, although it

provides useful information, it limits the ability to obtain a full picture of marital virtues and their interactions with individual functioning, communication, and relationship adjustment. More research is needed in this area using the entire instrument.

In order to enhance the view and understanding not only of marital virtues, but of each variable and their interactions, additional research is required. In particular, research is needed that focuses on coupled respondents and gathers data not only from single-respondents, but from their partners as well. In this way, a broader understanding of each variable can be reached. Given the correlational nature of marital virtues, a study of coupled data will allow for more definite conclusions to be drawn about this variable. In addition, longitudinal research in this area would help provide a clearer picture of how each variable may affect the others over time.

A final area for additional research is clinical and educational applications of the present findings. The present study suggests that increasing individual well-being and marital virtues may be key in improving relationship adjustment. The findings suggest that increasing the positives in a person's life may be more beneficial in increasing their relationship adjustment than lowering the negatives. However, more research is needed to determine the best course of action to achieve this goal. Additionally, further theoretical and empirical work is needed to clarify the best ways to intervene in the area of marital virtues.

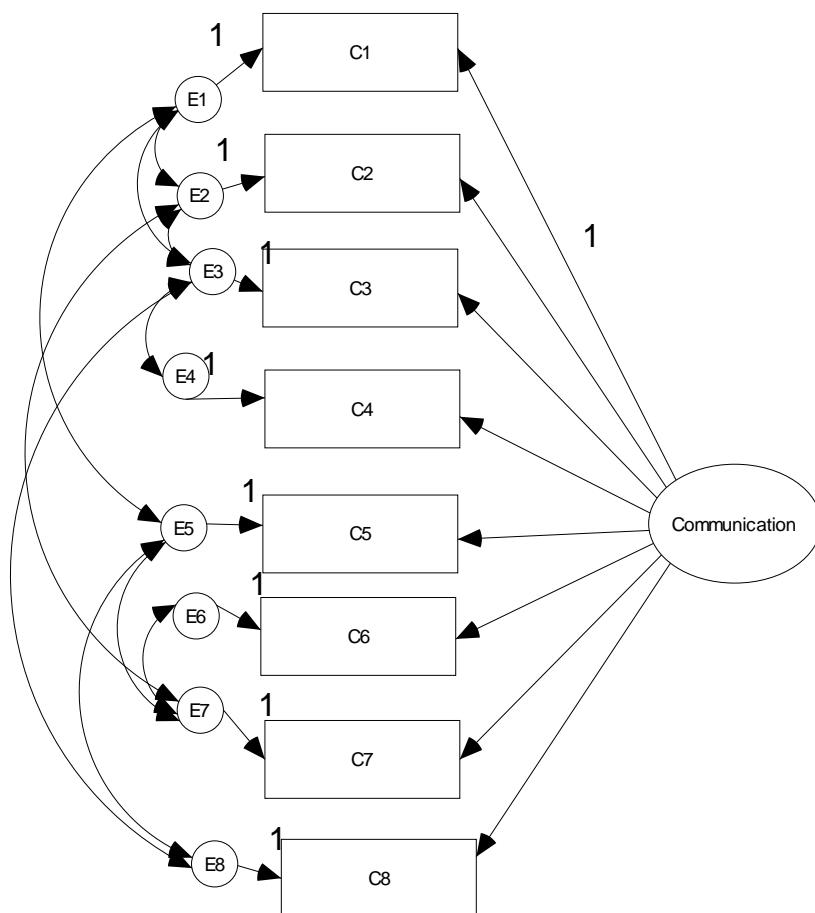
Appendix A  
Measurement Models



$\chi^2 = 5.7$ ,  $df = 10$ ,  $RMSEA = .000$ ,  $NFI = .990$

Standardized Regression Weights		Estimate
C1	<--- Communication	.644
C2	<--- Communication	.627
C3	<--- Communication	.517
C4	<--- Communication	.755
C5	<--- Communication	.565
C6	<--- Communication	.631
C7	<--- Communication	.666
C8	<--- Communication	.614

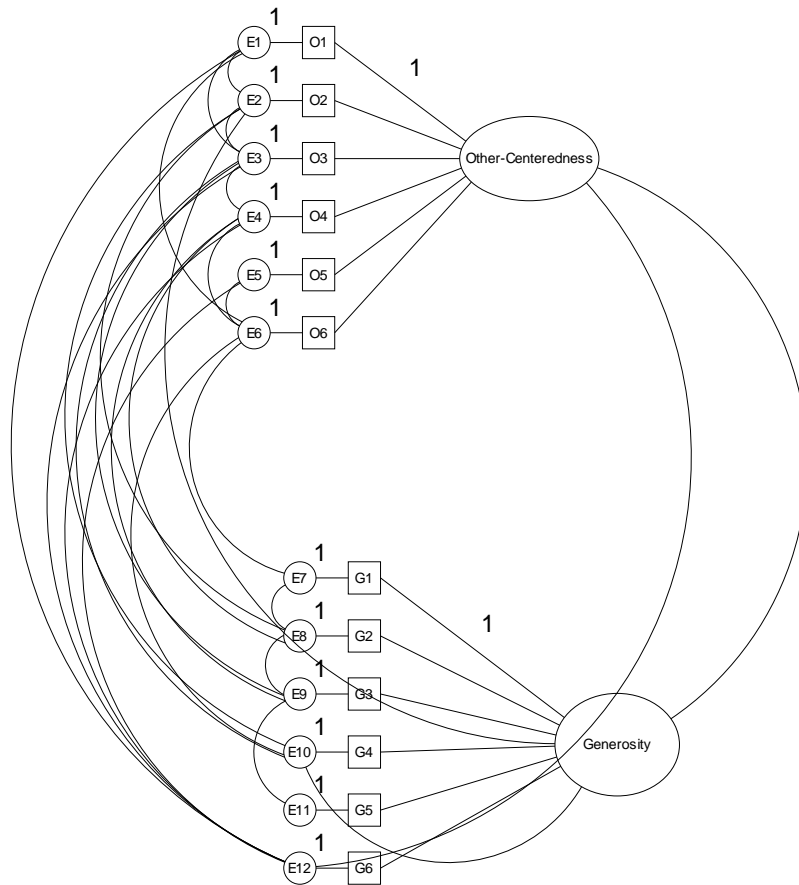
Communication: Males



$\chi^2=9.2$ ,  $df=10$ ,  $RMSEA=.000$ ,  $NFI= .987$

Standardized Regression Weights		Estimate
C1	<--- Communication	.732
C2	<--- Communication	.804
C3	<--- Communication	.495
C4	<--- Communication	.830
C5	<--- Communication	.513
C6	<--- Communication	.565
C7	<--- Communication	.649
C8	<--- Communication	.557

Communication: Females



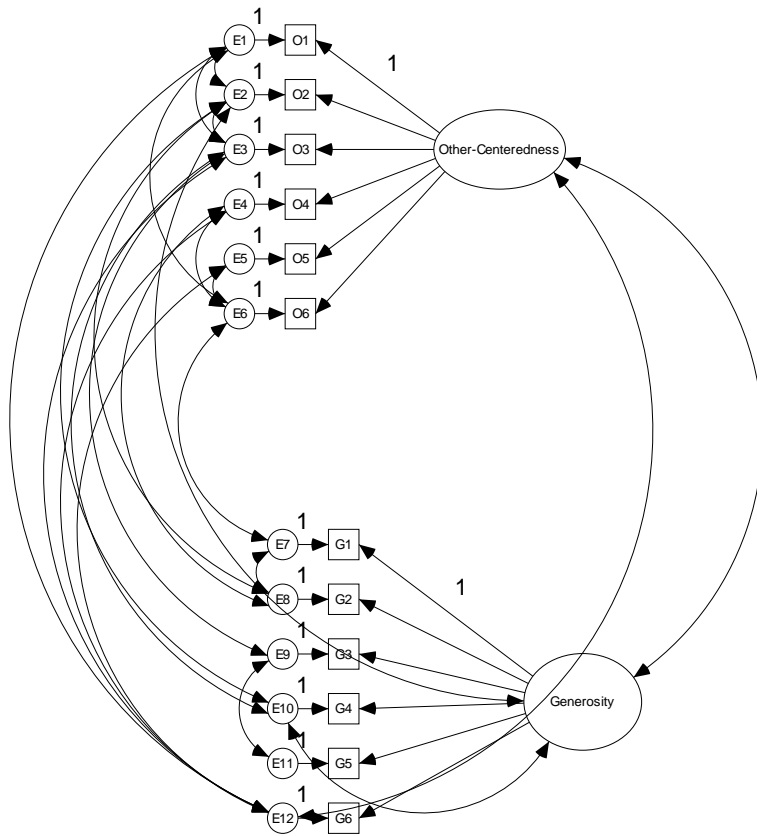
$\chi^2=30.9, df=28, RMSEA=.023, NFI= .981$

#### Marital Virtues: Males

Un-Standardized Regression Weights		Estimate	S.E.	C.R.	P	Label
O1	<--- Other-Centeredness	1.238	.137	9.052	***	
O2	<--- Other-Centeredness	1.447	.145	9.999	***	
O3	<--- Other-Centeredness	1.277	.133	9.595	***	
O4	<--- Other-Centeredness	1.024	.115	8.936	***	
O5	<--- Other-Centeredness	.872	.100	8.756	***	
O6	<--- Other-Centeredness	1.000				
G1	<--- Generosity	.844	.066	12.776	***	
G2	<--- Generosity	.501	.077	6.510	***	

Un-Standardized Regression Weights		Estimate	S.E.	C.R.	P	Label
G3	<--- Generosity	.878	.061	14.412	***	
G4	<--- Generosity	.472	.081	5.829	***	
G5	<--- Generosity	1.043	.064	16.312	***	
G6	<--- Generosity	1.000				





$\chi^2=32.6$ ,  $df=32$ ,  $RMSEA=.009$ ,  $NFI= .982$

#### Marital Virtues: Females

Un-Standardized Regression Weights		Estimate	S.E.	C.R.	P	Label
O1	<--- Other-Centeredness	1.126	.099	11.338	***	
O2	<--- Other-Centeredness	1.178	.106	11.098	***	
O3	<--- Other-Centeredness	1.169	.103	11.331	***	
O4	<--- Other-Centeredness	.965	.085	11.389	***	
O5	<--- Other-Centeredness	.850	.074	11.450	***	
O6	<--- Other-Centeredness	1.000				
G1	<--- Generosity	.935	.085	11.057	***	
G2	<--- Generosity	.573	.077	7.465	***	

Un-Standardized Regression Weights		Estimate	S.E.	C.R.	P	Label
G3	<--- Generosity	.823	.066	12.447	***	
G4	<--- Generosity	.441	.086	5.151	***	
G5	<--- Generosity	1.076	.062	17.370	***	
G6	<--- Generosity	1.000				

## Appendix B

### *Ethical Considerations*

When conducting research with human participants, ethical considerations come to the forefront. Primary among these ethical concerns are the principles of beneficence, justice, and respect. Creswell (2003) suggests that ethical issues need to be considered throughout the research process. He identifies five distinct areas in which ethical issues should be anticipated and addressed. These are: (a) the research problem statement; (b) the purpose statement and research questions; (c) data collection; (d) data analysis and interpretation; and (e) writing and disseminating the research.

Beneficence is of primary concern when formulating the research problem statement. To address the issue of beneficence, I considered what would benefit both the participants in the study as well as the larger society. Personal biases were taken into consideration when determining what is or is not of benefit. In this study, for instance, personal views on relationships and marriage were considered.

When crafting the purpose statement and research questions, respect comes into play along with beneficence. In addition to considering what will be of benefit, I also respected the participants by accurately describing the research and its purpose to the participants. This helps respect the autonomy of clients by allowing them to choose whether or not to participate in the research based on a complete and accurate description. This issue carries over into data collection and the need for informed consent. The informed consent must be clear in conveying the voluntary nature of the research, the purpose of the study, the

procedures involved, the participants' rights, and benefits of the study (Creswell, 2002). The Institutional Review Board (IRB) is instrumental in addressing ethical concerns during the data collection phase of the research. The IRB reviews the proposed research plans and helps protect participants from harm in any form (i.e. physical, social, economic, etc.) (Sieber, 1998). The research for this study has undergone approval by the IRB of the University of Kentucky and has a detailed informed consent.

Ethical issues persist in data analysis and interpretation. Crewsell (2003) suggest the importance of protecting anonymity of participants, safe keeping data, and properly interpreting it. In this study, informed consents were signed and returned to a sealed box prior to the distribution of the survey, which was then also returned to a different box. These issues, as well as that of justice, are also of concern in the writing and disseminating of the research. To address these, I considered the impact of my report on different audiences, used precise and appropriate language to avoid bias, refrained from in any way altering or withholding findings (Neuman, 2000), and will release detailed information regarding the research from which the readers can determine for themselves the credibility of the study (Neuman, 2000).

## Appendix C

### *Demographic Information*

There are 204 males (48%) and 218 females (52%). There are 390 married participants (92%) and 32 cohabitating participants (8%). Of the 390 married participants, 192 (49%) are male and 198 (51%) are female. Of the 32 cohabitating participants, 12 (37.5%) are male and 20 (62.5%) are female. Ages of participants range from 20 to 81. The average age is about 41.

The sample consists of 339 (80%) white and 83 (20%) non-white participants. Most participants had at least a Bachelor's degree. Of the 422 participants, 113 (26.8%) had a graduate degree. One hundred fifty-two (36%) had a Bachelor's degree. Ninety (21.3%) had a two-year or technical degree. The remaining participants had a high school education/GED or less. Fifty-six (13.3%) had their high school diploma or GED, six (1.4%) had completed some high school, and 1 (.2%) had completed 8th grade or less. The remaining .9% did not report.

The average income among participants was between \$50,000 and \$74,999 a year before taxes. Of the 422 participants, 14 (3.3%) earned under \$10,000, 33 (7.8%) earned between \$10,000 and \$24,999, 71 (16.8%) earned between \$25,000 and \$49,999, 97 (23%) earned between \$50,000 and \$74,999, 80 (19%) earned between \$75,000 and \$149,000, and 37 (8.8%) earned over \$150,000. The remaining 3.3% did not report. The majority of participants (80.6%) reported perceiving their financial situation as either "very secure" or "stable".

The majority of the sample identified as Christian. Of the 422 participants,

132 (31.3%) identified as Roman Catholic, 245 (60.4%) identified as Protestant, Latter-Day Saints, or Non-denominational Christian, 2 (.5%) identified as Buddhist, 6 (1.3%) identified as other, and 17 (4%) had no religious preference. The remaining 2.4% did not report. Along with identifying as Christian, the majority of the sample (87.9%) identified as either “very religious” or “moderately religious”.

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## VITA

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### EDUCATION

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### PROFESSIONAL EXPERIENCE

Bluegrass Healthy Marriage Initiative (UK Dept. of Family Studies)  
Research Assistant, 8/2006-present

University of Kentucky Family Center  
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The Louis La Parte Florida Mental Health Institute  
Data Entry, 03/2006-05/2006

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### SCHOLARLY ACTIVITIES

Bradford, K., LaCoursiere, J.A., Veldorale-Brogan, A.M., Whiting, J.B., & Roberts, M.D. (2007, October). *Stages of Marital Change and Relationship Adjustment*. Poster session presented at the 65<sup>th</sup> Annual American Association for Marriage and Family Therapy Conference, Long Beach, CA.

Barth, P., Bradford, K., Feldman, D., Ho, M., LaCoursiere, J., & Veldorale-Brogan, A. (2008, February). *Ethical Decision Making Processes with Underserved Populations: Issues of Class, Ethnicity/Race, and Sexual Orientation*. Workshop presented at the Annual Kentucky Association for Marriage and Family Therapy Conference, Louisville, KY.